REMARKS

Reconsideration and withdrawal of the rejections set forth in the Office Action dated December 16, 2003 are respectfully requested. The applicant petitions the Commissioner for a 2-month extension of time: a separate petition accompanies this amendment.

I. Amendments

Claim 19 is amended to recite in the first instance "plasmon resonant entities (PREs), as supported on page 10, line 4. Claim 19 is also amended to move the language from the premable into the body of the claim "a field having a plurality of PREs."

Claims 19 and 23 are amended to remove the word "such" as discussed below with respect to the rejection under 35 U.S.C. §112, second paragraph.

Claim 25 is amended to correct recitation of "target" to 'field'.

The specification is amended to correct typographical errors.

Accordingly, no new matter has been added by these amendments.

II. Rejections under 35 U.S.C. §112, second paragraph

Claims 19-29 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to point out and distinctly claim the subject matter. The specific rejections are addressed individually.

Claim 25 was objected to for lack of antecedent basis for "said target." The claim is amended to refer to "said field", which is earlier set forth in claim 19.

Claims 19 and 23 were objected to for use of the word "such". As noted above, this word is omitted from the claims.

Accordingly, withdrawal of the 35 U.S.C. § 112, second paragraph rejection is respectfully requested.

III. Rejections under 35 U.S.C. §102

Claims 19-29 are rejected under 35 U.S.C. 102(e) as allegedly anticipated by King *et al.* (U.S. Patent No. 5,633,724).

A. The Present Invention

The present invention is directed to an appratus for interrogating a field. The apparatus is comprised of:

(i) an optical light source for illuminating a field having a plurality of plasmon resonant entities (PREs) distributed therein,

(ii) an optical detector for detecting a spectral emission characteristic of individual PREs and other light scattering entities in the field, when the field is illuminated by the light source,

(iii) an image processor operatively connected to the detector for constructing, from signals received from the detector, a computer image of the positions and values of the spectral emission characteristic of individual PREs and other light-scattering entities present in the field,

(iv) discriminator means for discriminating PREs with a selected spectral signature from other light-scattering entities in the computer image, and

(v) output means for displaying information about the field based on the information about the selected PREs.

B. The Prior Art

KING ET AL. describe an appratus for detecting a target substance in a pixel array. A pixel, according to King et al., refers to an individual member of a chemical, e.g., polymer, array (Col. 4, lines 36-40). The apparatus includes a light source (Col. 5, line 18), an optical detector (Col. 4, line 54), and a computer for collecting and analyzing the data (Col. 4, lines 57-60).

C. Analysis

The standard for lack of novelty, that is, for anticipation, is one of strict identity. To anticipate a claim for a patent, a single prior source must contain all its essential elements. M.P.E.P. § 2131.

The claimed apparatus is for interrogating a field having a plurality of plasmon resonant entities (PREs) distributed over the field. As noted in the specification, a PRE refers to a structure, such as a particle, that exhibits plasmon resonance when excited with electromagnetic energy. In the apparatus, a plurality of PREs are distributed in a field and then illuminated with a light source. The spectral emission of the PREs is detected, from which a computer image of the positions and values of the emission spectral of the PREs (and any other light-scattering entities in the field) is constructed. Information about the field is gleaned by discriminating PREs with selected spectral signature from the other light-scattering entities in the field.

Accordingly, the claimed apparatus includes (i) an optical light source for illuminating the field containing the PREs; (ii) an optical detector; (iii) an image processor; (iv) discriminating means for discriminating PREs with a selected spectral signature from other light-scattering entities in the field; and (v) output means.

The apparatus in the King *et al.* document nowhere shows or suggests claim element (iv): discriminating means for discriminating PREs with a selected spectral signature from other light-scattering entities in the field. In King *et al.*, the total intensity of all light from the pixel array reaching the detector is detected (Col. 5, lines 14-24; Col. 5, lines 53-60; Claims 1, 13, 19). No means of discriminating the light-scattering entities from one another, *e.g.*, from within an individual pixel or within the pixel array, is mentioned or suggested.

Accordingly, the standard of strict identity for anticipation has not been met and withdrawal of the rejection under 35 U.S.C. §102(e) is respectfully requested.

IV. Conclusion

In view of the foregoing, the applicant submits that the claims pending in the application comply with the requirements of 35 U.S.C. §112 and patentably define over the prior art. A Notice of Allowance is therefore respectfully requested.

If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is encouraged to call the undersigned at (650) 838-4402.

Respectfully submitted,

Date: May 17, 2004

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Title: Plasmon Resonant Particles, Methods and Apparatus
Inventors: Schultz, *et al.*
Docket No. 52003-8001.US01
Judy M. Mohr, Perkins Coie LLP
P.O. Box 2168, Menlo Park, CA 94026
1 of 1 **Annotated Sheet Showing Changes**

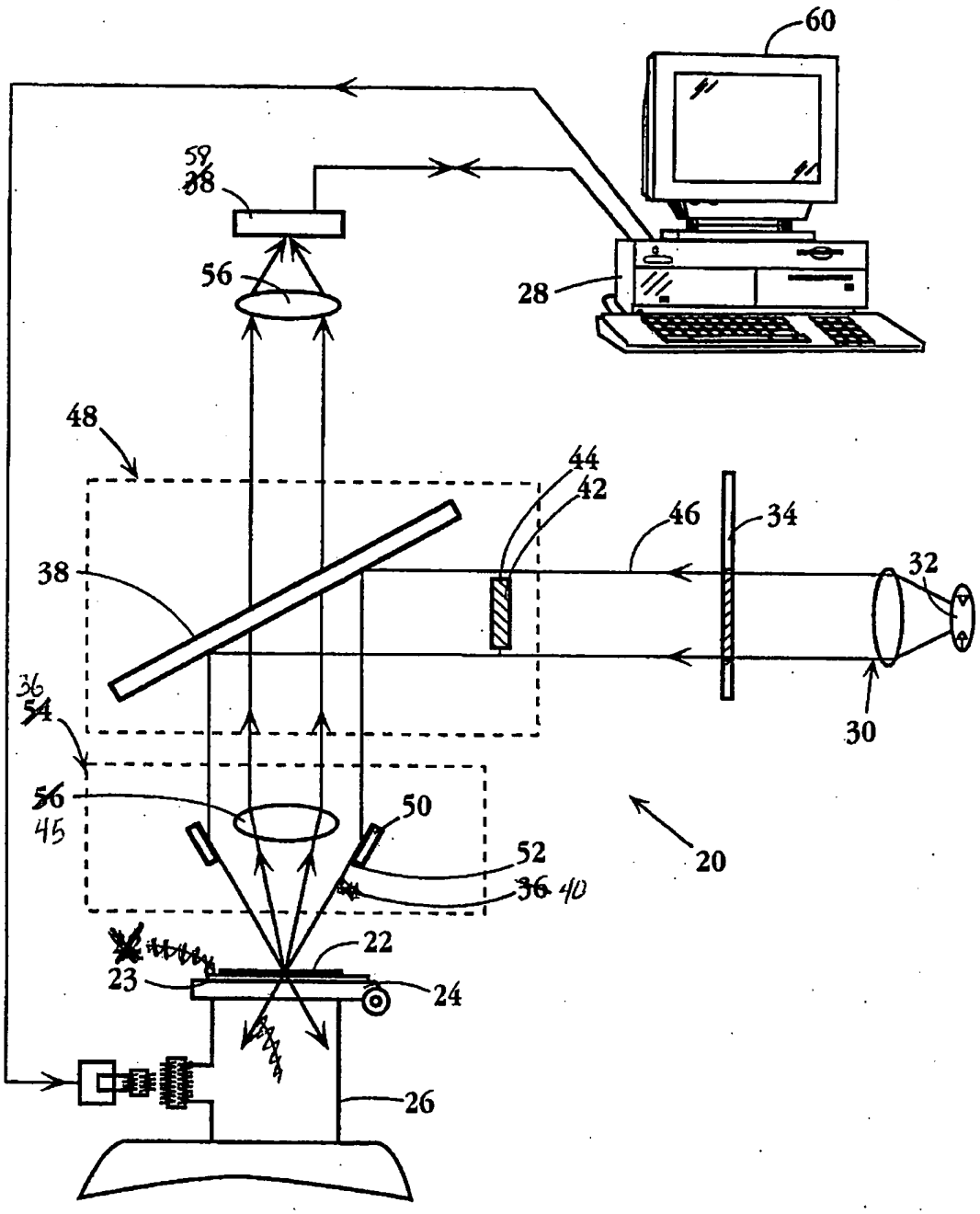

Fig. 3